

*Amendments to the Claims*

1. (Canceled)

2. (Currently Amended) The method of claim 3, wherein said allocating further comprises loading, into ~~a~~-memory ~~cell~~ cells accessible by the multiple graphics processing ~~unit~~ units, the three-dimensional computer graphics data corresponding to the ~~portion~~ portions of the scene that ~~lies~~ lie within the rectangular ~~subvolume~~ subvolumes to which the multiple graphics processing ~~unit~~ units ~~has~~ have been assigned.

3. (Currently Amended) A method for presenting three-dimensional computer graphics images of a scene using multiple graphics processing units, comprising the steps of:

(1) allocating, to ~~a graphics processing unit~~ of the multiple graphics processing units, three-dimensional computer graphics data such that said allocated three-dimensional computer graphics data ~~corresponds~~ correspond to ~~a portion~~ portions of the scene that ~~lies~~ lie within ~~a~~-rectangular ~~subvolume~~ subvolumes to which the multiple graphics processing ~~unit~~ units ~~has~~ have been assigned;

(2) ~~determining a viewing position, wherein said determined viewing position is independent of an angle formed between a first direction from said determined viewing position to the scene and a second direction that coincides with a boundary of the rectangular subvolume;~~

(3) ~~communicating said determined viewing position to the graphics processing unit;~~

(4) (2) rendering, by the multiple graphics processing units, said allocated three-dimensional computer graphics data;

(5) (3) combining said rendered three-dimensional computer graphics data with ~~three dimensional computer graphics data rendered by another graphics processing unit of the multiple graphics processing units~~ image combiners, wherein outputs from the multiple graphics processing units are direct inputs to first stage image combiners and outputs from at least two of the first stage image combiners are direct inputs to a second stage image combiner, thereby producing a three-dimensional computer graphics image; and

(6) (4) presenting, for viewing, said combined three-dimensional computer graphics image.

4. (Currently Amended) The method of claim 3, wherein said combining further comprises the step of:

(7) (5) ordering said rendered three-dimensional computer graphics data based on locations between said determined viewing position and the rectangular subvolumes to which the multiple graphics processing units have been assigned.

5. (Currently Amended) The method of claim 3, wherein said combining further comprises the step of:

(8) (5) blending said rendered three-dimensional computer graphics data.

6. (Canceled)

7. (Currently Amended) The method of claim ~~6~~ 9, wherein each of the ~~at least one image combiner~~ combiners has an associated frame buffer for storing said combined three-dimensional computer graphics image.

8. (Canceled)

9. (Currently Amended) A system for presenting three-dimensional computer graphics images ~~using multiple graphics processing units~~, comprising:

memory for storing three-dimensional computer graphics data;

~~a graphics processing unit of the multiple graphics processing units for rendering a portion~~ portions of the three-dimensional computer graphics data that ~~corresponds~~ correspond to a rectangular ~~subvolume~~ subvolumes to which said multiple graphics processing unit is units are assigned;

a communications means for communicating a viewing position to each of said multiple graphics processing unit units; and

~~at least one image combiner~~ combiners for combining the three-dimensional computer graphics data rendered by said multiple graphics processing unit units to produce a three-dimensional computer graphics image, wherein outputs from the multiple graphics processing units are direct inputs to first stage image combiners and

outputs from at least two of the first stage image combiners are direct inputs to a second stage image combiner;

~~wherein said viewing position is independent of an angle formed between a first direction from said viewing position to a scene represented by the three-dimensional computer graphics image and a second direction that coincides with a boundary of said rectangular subvolume.~~

10. (Currently Amended) The system of claim 9, wherein said memory is comprises memory cells such that each said memory cell is accessible by only one of the multiple graphics processing units.

11. (Canceled)

12. (New) The method of claim 3, further comprising, before step (2), the steps of:

(5) determining a viewing position; and

(6) communicating said determined viewing position to the multiple graphics processing units.